

1 **ABSTRACT**

2 Various implementations of the described subject matter provide for the  
3 management of a multi-dimensional sleep queue, such that a group of threads with  
4 a same wake-up time are removed from the multi-dimensional sleep queue in a  
5 deterministic amount of time that is independent of the number of threads in the  
6 removed group. This is significant because it allows an operating system to  
7 schedule other threads for execution within deterministic/predetermined time  
8 parameters. Moreover, the described subject matter also provides for inserting  
9 new threads into the multi-dimensional sleep queue in a manner that allows other  
10 processes to execute during the thread insertion process.  
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